

Amendments to the Specification:

Please amend the specification as follows:

The Examiner objected to paragraph [0003] because of the grammatical error caused by the use of the word “base” instead of “based.” Please replace paragraph [0003] with the following rewritten paragraph:

[0003] One form of PSK is binary PSK. In binary PSK, there are two phases separated from each other by 180° phase difference. The demodulator is ~~base~~ based on a synchronous detector using a reference signal of known phase. This known signal operates at the same frequency of the incoming signal carrier and is arranged to be in phase with one of the binary signals.

The Examiner objected to paragraph [0036] because of the use of $Y = X \text{ XOR } Y$ instead of $Y' = X \text{ XOR } Y$. Please replace paragraph [0036] with the following rewritten paragraph:

[0036] After step 410, a step 420 can be performed to translate the two communication bits obtained in step 410 into three bits. In alternative embodiments, different numbers of communication bits may be used. In an exemplary embodiment, the two communication bits are translated to three bits using a XOR operation and an adder (for the additional bit). Such a translation maps the X, Y relationship provided in Table 1 with the X, Y relationship provided in Table 2. If X and Y are bits used as X and Y in Table 2 and X' and Y' are bits used in Table 1 as X and Y, the relationship between X, Y and X', Y' can be represented as:

$$X = X'$$

$$\forall Y' = X \text{ xor } Y$$

The Examiner objected to [0025] because of the use of the language “a network”. With reference to FIGURE 1, the Examiner asserted that the phrase should be “a wireless network.” Applicant respectfully asserts that the application teaches a method of and system for modulating and demodulating a communication signal using differential quadrature phase shift keying (DQPSK) which can be employed in a wireless or wired network. Therefore, Applicant

respectfully submits a modification to Figure 1 to the language “NETWORK” instead of “WIRELESS NETWORK.”

Applicant requests that Examiner modify the specification as follows to correct the typographical errors. Please replace paragraph [0037] with the following rewritten paragraph:

[0037] After step 420, a step 430 can be performed to map the communication bits obtained in step 420 to DQPSK symbols. In an exemplary embodiment, a lookup table (such as the lookup table shown in Table 3 described with reference to FIGURE 2) is used to map the bits to the DQPSK symbols.